

Work Order ID 138694

Monday, November 09, 2015 11:03:49 AM

138694

TULMAR

Page 1

Item ID: PB67-43001-181

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Cover Plate

Start Date: 11/9/2015 Start Qty: 15.00

15

Cust Item ID:

Required Date: 11/27/2015 Req'd Qty: 15.00

15

Customer:

Reference:

Approvals:

Process Plan: *MF*

Date: *15-11-9*

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
B67-43001-181	D

100	FLOW WATER JET	0.00
-----	----------------	------

100

Waterjet

Memo

0.01

FLOW CNC Waterjet

1-Cut as per Dwg B67-43001

Dwg Rev: *D*

Prog Rev: *D*

****Grain direction along 7.19" ****

2-Deburr if necessary

(15)

02 15/11/25

110	QC2- Inspect parts off machine FAI/FAIB	0.00
-----	---	------

110

QC

Memo

0.00

Quality Control

(15)

02 15/11

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

DQA: _____ Date: _____



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							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

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Quality Control

15 of 22 12/12/04

15 ϕ 15-12-15 DAS 34 9.80

(15) 15.12.16. DAS
9
9.89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : _____			

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Item ID: PB67-43001-181 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Cover Plate
 Start Date: 11/9/2015 Start Qty: 15.00 ***15*** Cust Item ID:
 Required Date: 11/27/2015 Req'd Qty: 15.00 ***15*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180	Identify as per dwg & Stock Location: _____	0.00							
180	Memo	0.00							
Packaging		0.00							
Packaging		9.89							
190	QC5- Inspect part completeness to step on W/O	0.00							
190	Memo	0.01							
QC									
Quality Control									
200	PURCHASING	0.00							
200	Memo	0.00							
Purchasing	ISSUE P/O: <u>30795</u> <u>31110</u>								
Purchasing	SEND TO TALMAR FOR FOAM AND FABRIC								
	C OF C IS REQUIRED								

JAN 22 2016

CY DEC 21 2015 15

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : _____			

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 Required Date: 11/27/2015 Req'd Qty: 15.00 ***15*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	Receive & Inspect for Damage & Mat'l Certs	0.00							
210									
Packaging	Memo	0.01							
Packaging									
220	QC6- Inspect dimensions to drawing	0.00							
220									
QC	Memo	0.00							
Quality Control									
230	Identify as per dwg & Stock Location: MEZZ	0.00							
230									
Packaging	Memo	0.00							
Packaging									

15 DAS 6 9-89 FEB 24 2016

15 DAS 38 9-89 FEB 25 2016

15 DAS 6 9-89 FEB 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :							
Misidentified	☐	Past Due	☐								

Work Order ID 138694***138694***

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Monday, November 09, 2015 11:03:49 AM

Item ID: PB67-43001-181 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Cover Plate
Start Date: 11/9/2015 Start Qty: 15.00 ***15*** Cust Item ID:
Required Date: 11/27/2015 Req'd Qty: 15.00 ***15*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

240

QC21- Final Inspection - Work Order Release

0.00

240

QC

Memo

0.03

Quality Control

FEB 26 2016

FEB 26 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

Picklist Print

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Work Order ID: 138694

138694

Parent Item: PB67-43001-181

PB67-43001-181

Parent Item Name: Cover Plate

Start Date: 11/9/2015

Required Date: 11/27/2015

Start Qty: 15.00

Required Qty: 15.00

Comments: IPP Rev:A 08-06-20 new issue DD verified by:ec
10.10.04 per revC dwg EC verified by:DD

IPP Rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.032		Purchased		No		100	sf	171.5000	1.0572	16.69263			
M2024T3S 032									**	<u>02/15/11/25</u>			
2024-T3 .032 sheet													

Location

Loc Qty

Loc Code

MAT022

171.5

M130497

8.5

M132875

67

M133452

96

19

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

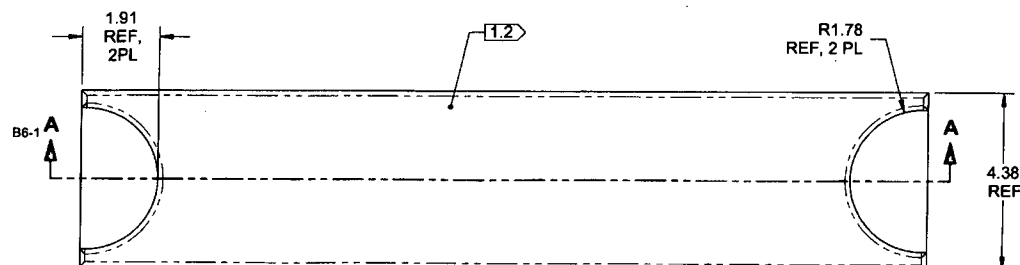
QA Closed: _____ Date: _____

Work Order update only ☐

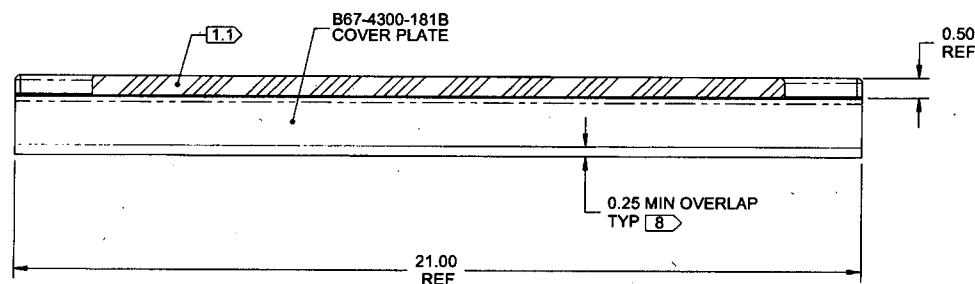
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Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
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Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
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Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

ITEM	QTY -181	P/N	DESCRIPTION
	X	B67-43001-181	COVER PLATE ASSEMBLY
1	1	B67-43001-181B	COVER PLATE
2	A/R	FOAM	SEE NOTE 1.1
3	A/R	FABRIC	SEE NOTE 1.2
4	A/R	ADHESIVE	SEE NOTE 1.3



B67-43001-181 COVER PLATE ASSEMBLY



SECTION A-A D8-1

NOTES:

1) MATERIAL:

1.1) FOAM: SBR/EPDM/CR BLEND, BLACK, ASTM D1056 2A2, 1/2" THICK, BRITTLENESS TEMP OF -40F, IAW ASTM D 746, FMVSS 302
1.2) FABRIC: 100% 420 DENIER NYLON, MIN THREAD COUNT 35X35, POLYURETHANE COATED ONE SIDE, COLOUR: BLACK
REF. TULMAR P/N 1495

1.3) ADHESIVE: URETHANE WITH CATALYST, TWO PART, CLIFTON LA4009 OR LA4009NOVOC
2) FINISH: BOND NEOPRENE TO COVER PLATE USING ADHESIVE. COVER WITH DENIER AS SHOWN.

3) TOLERANCES: PER TABLE 1 (ZN A3-1) UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

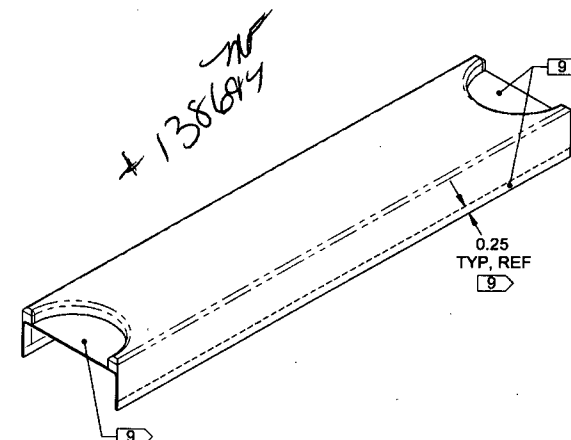
5) BREAK SHARP EDGES: N/A

6) IDENTIFICATION: N/A

7) WEIGHT: 0.78 lbs REF

8) DENIER NYLON TO BE BONDED ALL AROUND INNER SIDES OF PLATE

9) DENIER NYLON TO BE BONDED TO PLATE ON OUTER SIDE



RELEASED
2014-12-08

D	FOAM AND ADHESIVE SPEC CHANGE TO MATCH SUPPLIER MATERIAL REASON: SEE PAR #14-333	DB	14.07.14
C	REDRAWN PREMIER AVIATION DRAWING IAW DART QSI 018, QSI 043 AND TULMAR SAFETY SYSTEMS INC.'S MANUFACTURING PROCESS AND TOLERANCES ON FABRIC. 4.38 WAS 4.25. FOR PREVIOUS REVISIONS, REFER TO SHEETS 10 AND 29 OF PREMIER AVIATION DRAWING No. B67-43001. REASON: SEE PAR#09-011.	MB	10.04.27
REV.	DESCRIPTION	BY	DATE
DESIGN	RW	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		B67-43001-181	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.	N/A	COVER PLATE	NTS
DATE	14.07.14	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

TABLE 1

TOLERANCES ON FABRIC (PARTS AND ASSEMBLIES)
±1/8: DIMS <2
±1/4: DIMS 2 TO <10
±1/2: DIMS 10 TO <20
±5/8: DIMS 20 TO <40
±1.5%: DIMS EQUAL TO OR > 40

DQA: _____ Date: _____



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QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

8 7 6 5 4 3 2 1

D

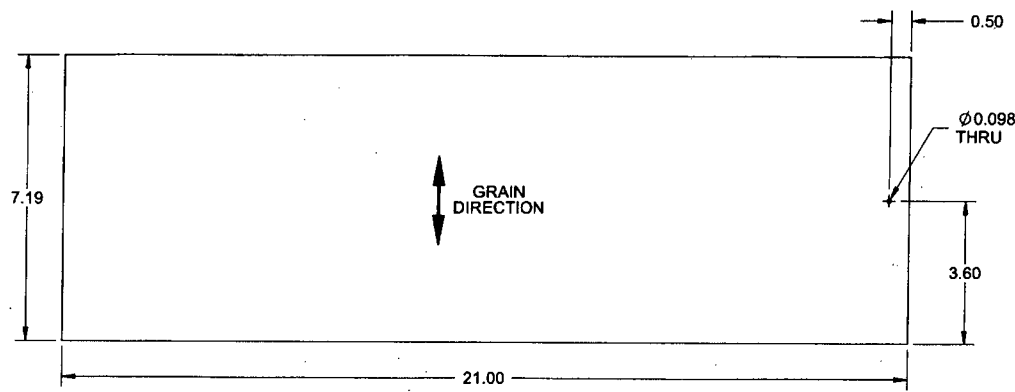
C

B

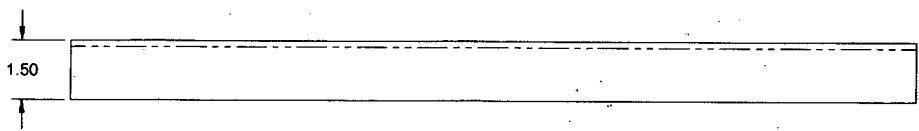
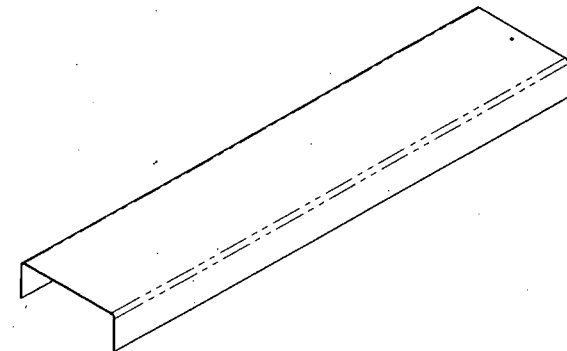
D

C

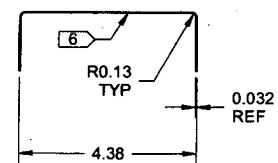
B



B67-43001-181F FLAT PATTERN



B67-43001-181B BENDING DETAIL
(MAKE FROM B67-43001-181F)



RELEASE
2014-12-08
MP

- NOTES:**
- 1) MATERIAL: 2024-T3 ALUMINUM SHEET, 0.032 THICK
PER AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209
REF. DART SPEC. M2024T3S.032
 - 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY WITH DART P/N "B67-43001-181B" AND B/N "BXXXXX" USING FINE POINT PERMANENT INK MARKER
 - 7) WEIGHT: 0.48 lbs

DESIGN	RW	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		B67-43001-181	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.	N/A	COVER PLATE	NTS
DATE	14.07.14	COPYRIGHT © 1995 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

A

A

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

10.04.15

Drying	Temperature	Moisture	Weight	Volume	Comments
0.098	-0.01 + .005	0.099	'	V: Dc-02	
3.60	+ .030	3.595	'	Top	
.50	+ .030	.501	'		
7.19	+ .030	7.196	'		
21.00	+ .030	21.00	'		

181-

DART AEROPAC LTD	Work Order:	138694
Documentation: cover plate	Part Number:	P867-4300-191
Inspection Draw: B67-4300 Rev: D		Part Number: 138694



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO31110**

Purchase Order Date 1/22/2016

PO Print Date 1/28/2016

Page Number 3 of 4

Order From :

VC-TUL001

TULMAR SAFETY SYSTEMS
1123 CAMERON ST
HAWKESBURY, ON K6A 2B8
CA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 613 632 1282

Ship To Contact

Ship To Phone

Ship Via: VENDOR'S TRUCK

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

CAD

FOB

FCA - (Free Carrier)

Line Total: \$2,400.00

6 138694

PB67-43001-181 COVER
PLATE

2/19/2016

15.00

\$ 30.00

\$1,950.00

Yes

2/19/2016

FOAM AND FABRIC AS PER DWG PD67-43001-181 REV. D
TULMAR P/N: 8421-103

Line Total: \$1,950.00

7 138693

PB67-43001-173 COVER
PLATE

2/19/2016

16.00

\$ 30.00

\$2,080.00

Yes

2/19/2016

FOAM AND FABRIC AS PER DWG PD67-43001-173 REV. D
TULMAR P/N: 8421-104

Line Total: \$2,080.00

PO Instructions: SALES QUOTE NO. 16014,16058

Note:

1/28/2016



J. ENNIS FABRICS

June 10, 2015

Fax To: Tulmar Safety Systems
Fax: 613-632-2030
Attention: Sandra Nadeau

Certificate of Conformance

Re: PO 28594-00 for Oxford 7 black

The goods shipped on P/O 28594-00 are as per sampled goods. Specification as follows:
As per mill documentation:

Oxford 7 black is in compliance with the following standards:

Width: Product is 58 Inches Wide.

Roll Size: Average Roll Length is 75 Yards.

Weight: Product Weight is 6.79 Ounces per Sq.Yd. /Product Weight is 10.94 oz per Lin.Yd.

Content: 100% Nylon

Coating: Product has a Polyurethane Coating (approximately 0.65 oz/ Sq.Yd. (18.5g/sq.yd.))

Denier: Yarn is 420 Denier.

Thread Count: Construction is 62 x 38 Threads per Square Inch

Protective Finish; Product is Water Repellent.

Hydro Resist: AATCC 127 (Suter): Average 800 mm

Piece # 111926200 Manufacture Date: 03/25/15, **Lot Number:** 444815

Sincerely;
J. Ennis Fabrics Ltd.

S, Nolan

Susan Nolan
Customer Service Specialist

cl's used to mfg:
B67-43001-181 Rev.D
B67-43001-173 Rev.D
B67-43001-73+MU Rev.C+1
B67-43001-69+MU Rev.D+1
B67-43001-33+MU Rev.C+1

Louise Laliberté (cc) Feb. 23/16

JUN 19 2015



TULMAR

Certificate of Conformance

Tulmar P/N 1637-001	Description Foam, SBR/EPDM/CR blend, black, ASTM D1056 2a2, 1/2" thick, 42"x72", brittle temp of -40°F IAW ASTM D746, FMVSS 302	Dwg # N/A	Revision -	Qty 4
Tulmar PO # 27193-00	Line Item # 1	Supplier Name / Address Am Rubber & Foam Gaskets Inc, 2074 Steeles Ave, East Units 1 & 2, Brampton On L6T 4Z9		Supplier Packing Slip # 12190

Supplier Declarations:

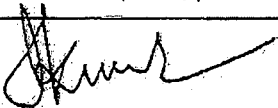
Hazardous Materials Acknowledgement	The items described below may contain, and their processing may have included, the following substances:	Hexavalent Chromium; Cadmium; Beryllium; Nickel; Mercury; Lead; Asbestos; Radioactive elements YES ☐ NO ☒
Country of Origin of Goods : CANADA		if YES, please complete the HazMat Acknowledgement form @ www.tulmar.com
Limited Shelf-Life	<u>Definition:</u> If material is consumed or transformed into final product before end of shelf-life there is no effect on final product.	These items have a limited Shelf-Life YES ☐ NO ☒
Expiry date	<u>Definition:</u> Date after which performance will no longer be as intended - expiration is transferred to the final product.	These items have an expiry date YES ☐ NO ☒

if YES, please complete the Time Expired - Shelf-Life questionnaire @ www.tulmar.com

Additional Information (MRS#, MRA#, limitations, etc...):

--

I hereby certify that the goods listed hereon have been inspected and/or tested, as applicable, and conform to all specifications and requirements detailed in the contract or purchase order and relevant quality clauses. Objective evidence to support this statement is on file and can be made available upon request. Should further information be required, please contact:

Signature 	Name Joseph Malheur	Date (DD-MMM-YYYY) 02/01/2014
Title QA MANAGER	Email Joe.Malheur@amrubber.ca	Phone # 647-501-1449

Form Revision 13 Aug 2012

TSS # **1637-001/05**

50

TULMAR

Certificate of Conformance

Tulmar P/N 2530	Description Thread, Nylon, Black, A-A 56226, T12, CLA Size F, Quality Class - G10, Country of Origin USA M2 C0852	Dwg #	Revision	Qty 40 Sp
Tulmar PO # 27000-00	Line Item # 1	Supplier Name / Address CANSEW INC, 111 Chabanel West, Suite 101, Montreal, Que., H2N 1C9		Supplier Packing Slip # H66082

Supplier Declarations:

Hazardous Materials Acknowledgement	The items described below may contain, and their processing may have included, the following substances:	Hexavalent Chromium; Cadmium; Beryllium; Nickel; Mercury; Lead; Asbestos; Radioactive elements YES ☐ NO ☒
Country of Origin of Goods : USA		if YES, please complete the HazMat Acknowledgement form @ www.tulmar.com
Limited Shelf-Life	<u>Definition:</u> If material is consumed or transformed into final product before end of shelf-life there is no effect on final product.	These items have a limited Shelf-Life YES ☐ NO ☒
Expiry date	<u>Definition:</u> Date after which performance will no longer be as intended - expiration is transferred to the final product.	These items have an expiry date YES ☐ NO ☒

if YES, please complete the Time Expired - Shelf-Life questionnaire @ www.tulmar.com

Additional Information (MRS#, MRA#, limitations, etc...):

--

I hereby certify that the goods listed hereon have been inspected and/or tested, as applicable, and conform to all specifications and requirements detailed in the contract or purchase order and relevant quality clauses. Objective evidence to support this statement is on file and can be made available upon request. Should further information be required, please contact:

Signature 	Name Hershie Schachter	Date (DD-MMM-YYYY) 28-Jan-2014
Title President	Email hershie@cansew.ca	Phone # (514) 382-2807

Form Revision 13 Aug 2012

2530/58 (SN)



48 Burgess Place
Wayne, NJ 07470

Certificate Of Analysis

11/11/2015

Sales Order Number: 5927

Manufactured for
TULMAR SAFETY SYSTEMS

Customer Order Number: 29283

14172-C6.9A LA4009NOVOC, P/N 7122-001 14172-C6.9A LA4009NOVOC, UNLINED GALLON CAN

Lot# PNJ-1015-0252

Qty: 52 EA

Manufacture Date: 11/4/15

Expiration Date: 11/4/16

Test(s)	Results	Min	Max	
% Solids @275F for 30 minutes	14.3000	13.00	15.00	Percent
Brookfield, RVT, #3 Spindle, 20RPM, 78F	1,150.0000	800.00	1,500.00	Centipoise
Visual check for dry film color	pass	(CLEAR TO HAZY YELLOW) PASS/FAIL		

"The material supplied conforms to all applicable engineering drawing, specifications and PO requirements."

Dan Constantino

Daniel Constantino
Quality Assurance Mgr/ISO Coordinator

Country of Origin: USA



7122-001 3#5

PACKING SLIP

TULMAR

Tulmar Safety Systems Inc.
1123 Cameron Street
Hawkesbury, ON K6A 2B8
Tel: 613-632-1282
Fax: 613-632-2030
GST R132478223
MID : XOTULSAF1123HAW
email: info@tulmar.com

Packing Slip No. Page
56789 1

Ship Date
2/23/2016

Bill To:

Dart Aerospace
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship To:

Dart Aerospace
1270 Aberdeen Street
Tel: 613-632-9577
Hawkesbury, ON K6A 1K7
Canada

Order number	Sales order date	Account number	Loc	Account manager
33591	1/27/2016	CDART100	H	Francine Bigras
PO number	Ship via	Shipping Terms		
PO31110	Pick-Up	FOB HAWKESBURY		
Item No.	Quantity ordered	UOM	Qty Shipped/Returned	Quantity on back order
Description				
QA: A004 A005 A007 A016 A026 A040				
A041 A043 (TSS = 5 YRS ONLY)				

8421-103	15.00	EA	15.00	
Cover Plate				
Drawing No: B67-43001-181				
DWG Rev: D				
Item 6				
Lot no.: BATCH0000000010	15.00			
8421-102	11.00	EA	11.00	
D-Pad Assembly, Long				
Drawing No: B67-43001-85 + MU				
DWG Rev: D+1				
Lot no.: BATCH0000000010	11.00			
8421-101	54.00	EA	54.00	
D-Pad Assembly, Short				
Drawing No: B67-43001-83				
DWG Rev: D				
Lot no.: BATCH0000000012	54.00			
8421-104	16.00	EA	16.00	
Cover Plate				
Drawing No: B67-43001-173				
DWG Rev: D				
Item 7				
Lot no.: BATCH0000000011	16.00			
8421-105	16.00	EA	16.00	
Cover Plate, 20°				
Drawing No: B67-43001-73+MU				
DWG Rev: C+1				
Item 2				
Lot no.: BATCH0000000009	16.00			